

1 **DETAILED DESCRIPTION OF THE BARRIER ALTERNATIVES**

2 For the purposes of the environmental analysis for the South Delta Improvements, the following  
3 action alternatives will be evaluated. The final alternative may represent a hybrid of these  
4 alternatives, such as phased implementation of additional barriers on Middle River upstream of  
5 Victoria Canal and Old River at Tracy to address flow/circulation issues. Such phased barrier  
6 construction would be evaluated by the Barrier Operations Coordination Team and would only  
7 be undertaken if the actions included in the Stage 1 South Delta Improvements, including  
8 detailed field studies and analysis, fail to provide an appropriate balance of fisheries, water  
9 quality, and water supply availability benefits. Consolidation of agricultural intakes may include  
10 an evaluation of pumping water from Clifton Court Forebay to irrigate south Delta farmland that  
11 currently uses water diverted from Grant Line Canal. Additional actions done after the  
12 completion of the preferred alternative that are deemed necessary to meet balance benefits will  
13 require separate environmental documentation.

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15 • Alternative 1 would include installation of a permanent barrier at the Head of Old River and  
16 extensive sediment dredging of the south Delta channels and a maintenance dredging  
17 program. This configuration would also include extending and screening agricultural  
18 diversions to meet project purposes throughout the south Delta region and regulating flows  
19 through the permanent barrier at the Head of Old River, ~~as needed, to maintain to contribute~~  
20 to maintaining south Delta water quality.

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22 • Alternative 2a would expedite construction of three permanent operable barriers at the Head  
23 of Old River, Old River at Tracy, and Middle River upstream of Victoria Canal; phasing out  
24 all temporary barrier installations as soon as feasible. This alternative would also include  
25 dredging segments of south Delta channels and extending and screening agricultural  
26 diversions to meet project purposes.

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28 • Alternative 2b would expedite construction of three permanent operable barriers at the Head  
29 of Old River, Old River at Tracy, and Middle River upstream of Victoria Canal; phasing out  
30 all temporary barrier installations as soon as feasible. This alternative would also include  
31 consolidation of agricultural intakes along Grant Line Canal. Only minor dredging ~~would~~  
32 may be undertaken as part of Alternative 2b.

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34 • Alternative 3 would expedite construction of four permanent operable barriers at the Head of  
35 Old River, Old River at Tracy, Middle River upstream of Victoria Canal, and Grant Line  
36 Canal; and phasing out all temporary barriers installations as soon as feasible. This  
37 alternative would also include localized spot dredging of south Delta channels downstream of  
38 the barriers to meet project purposes.